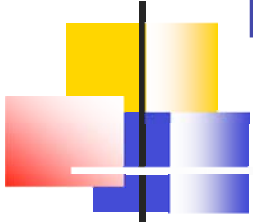


Water Resources Task Force

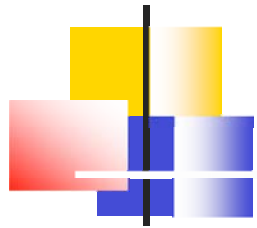
Region 1 Alternative Water Supply Concepts

May 1, 2009



Region 1 Project Concepts

- Expansion of North Regional WWTP Reclaimed Water System into Coconut Creek and Other Areas
- Expansion of Pompano Beach Reclaimed Water System and Wholesale Lighthouse Point with Distribution System to Deerfield Beach
- Creation of Saltwater Intrusion Barrier
- Construction of Floridan Aquifer Systems
- Recharge of Middle Floridan Aquifer



Reuse Flow (MGD) for Region 1 Facilities as Reported by FDEP

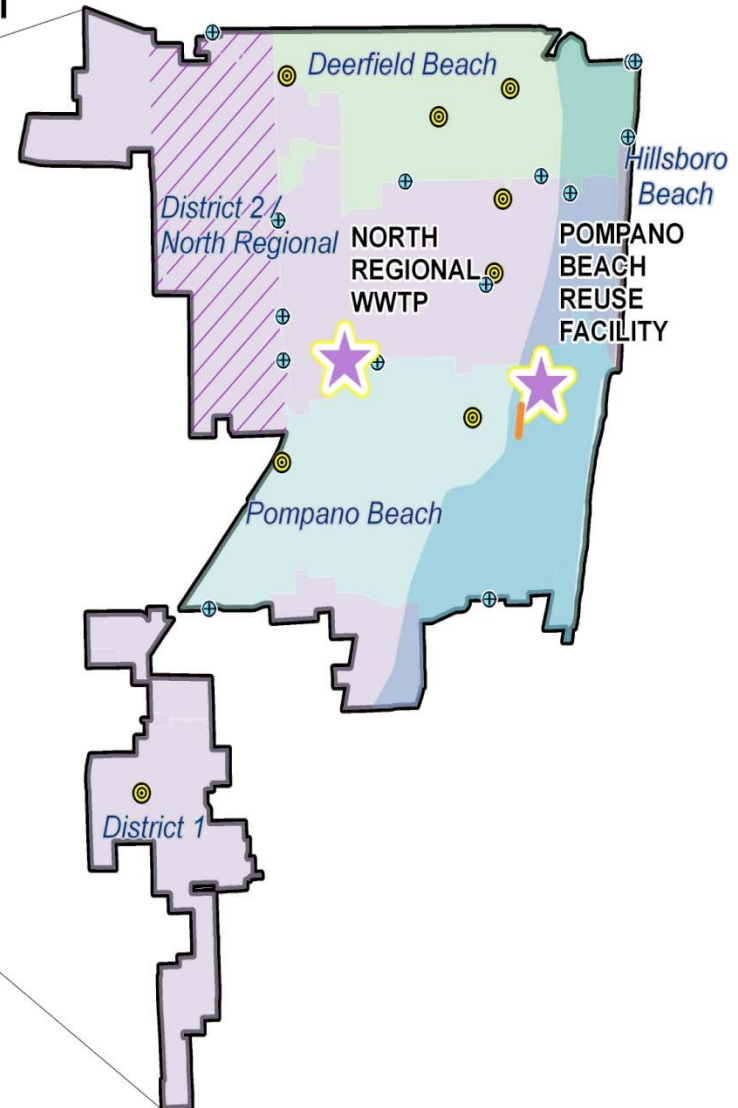
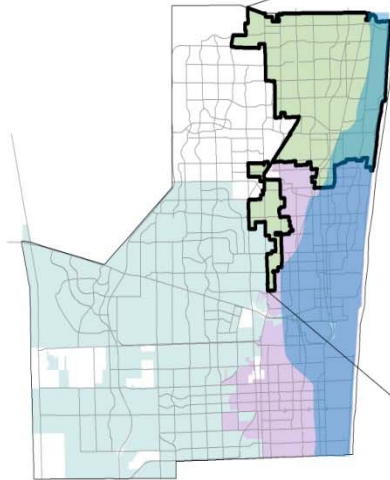
<u>Year</u>	<u>BC North Regional</u>	<u>Pompano Beach</u>	<u>Others in Broward</u>	<u>Total in Broward</u>	<u>Percent BC North Regional & Pompano Beach</u>
2006	4.32	1.25	6.34	11.91	47%
2007	4.44	1.35	5.05	10.84	53%



Water Resources Task Force
May 1, 2009

REGION 1 - Regional Reuse Project Proposal

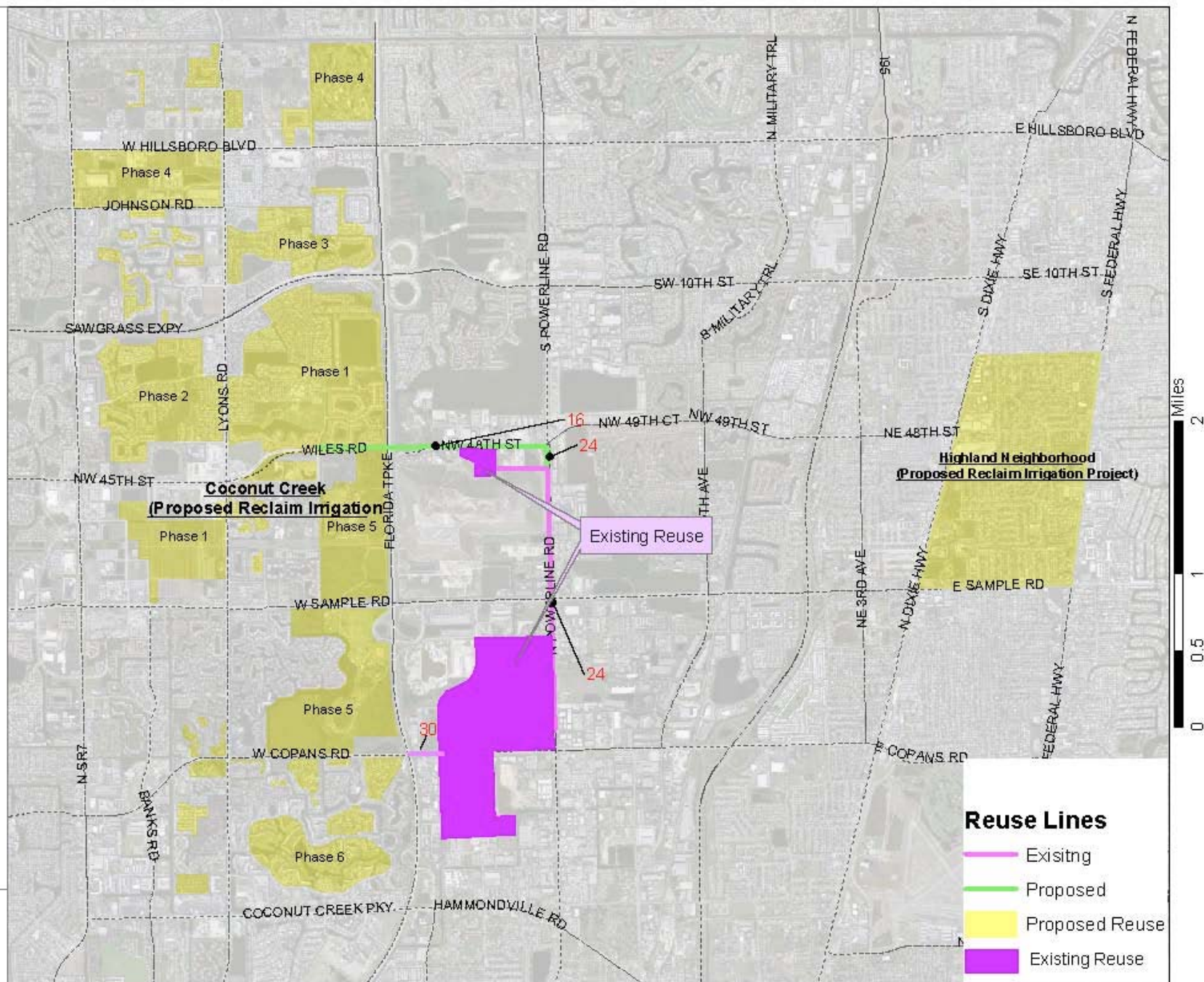
Coconut Creek Irrigation



Legend

-  Reuse Facility
-  Wellfield
-  Pompano Infiltration Trench
-  Interconnect
-  Saltwater Intruded Area
-  Area to benefit from Project

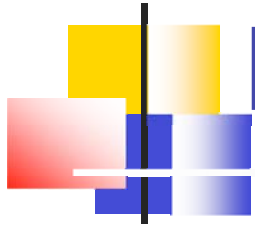
Attachment for 8b





Construction of Wiles Road Reclaimed Water Line
into Coconut Creek

North Regional WWTP



Reclaimed Water

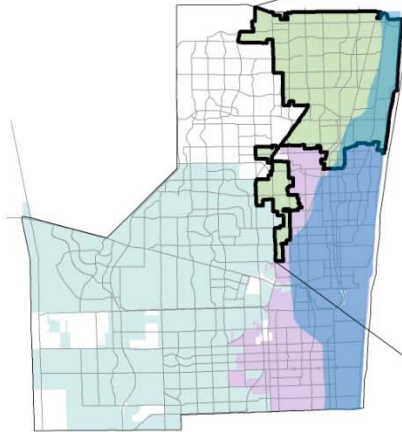
- Current Plant Capacity 10 MGD
- 2007 Flow 4.44 MGD
- Total Future Coconut Creek Reclaimed Water Demand 2.8 MGD
- Reuse Types – Public Access Areas and Landscape Irrigation, Industrial (Cooling Water for Wheelabrator & WWTP Use)
- Expansion Potential to 20 MGD



Water Resources Task Force
May 1, 2009

REGION 1 - Regional Reuse Project Proposal

Irrigation and Wellfield Protection

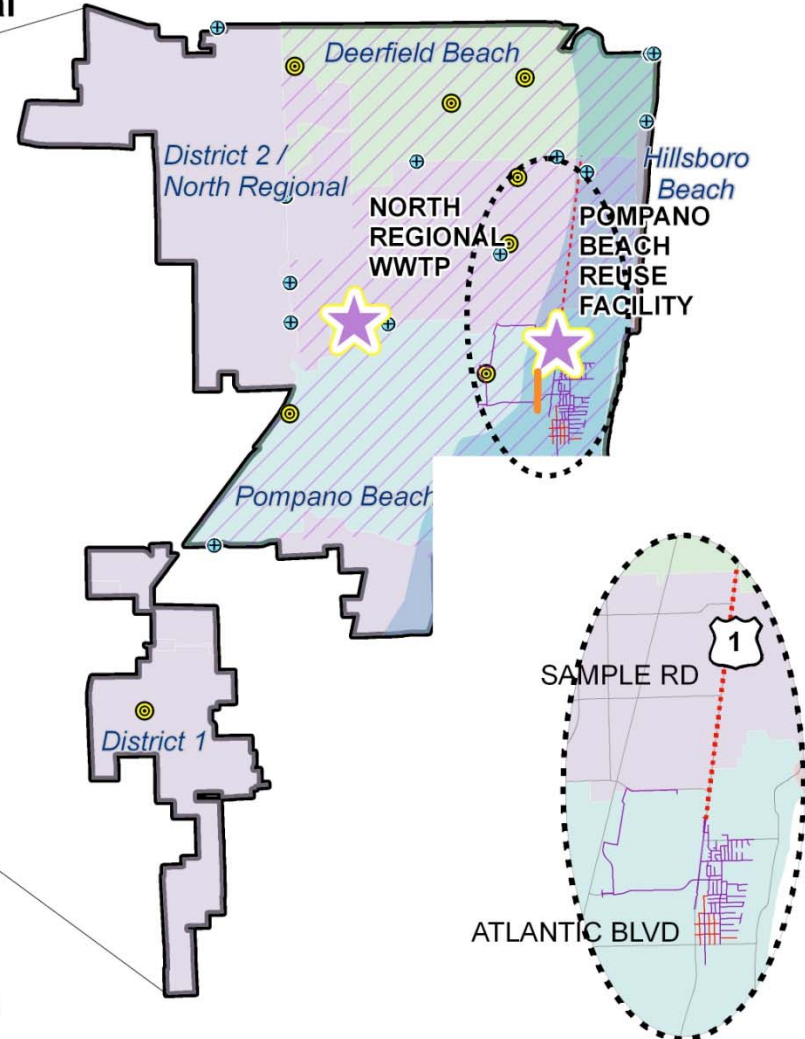


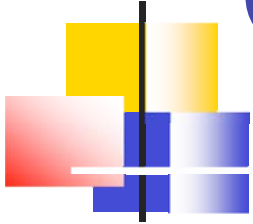
Legend

- Reuse Facility
- Wellfield
- Interconnect
- Pompano Infiltration Trench
- Reuse Line
- Saltwater Intruded Area
- Area to benefit from Project

Reuse Lines

- Existing Reuse Line
- 2009 Proposed Expansion
- Lighthouse Point 4" Service Line

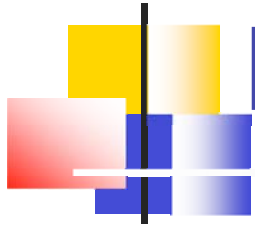




City of Pompano Beach Reuse



Pompano Beach

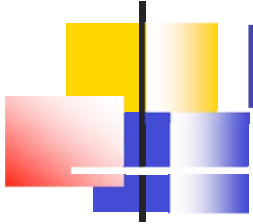


Reuse Water

- Current Plant Capacity is 7.5 MGD
- 2007 Flow is 1.35 MGD
- Reuse Types - Public Access Areas and Landscape, Golf Course and Residential Irrigation
- Expansion Potential to 12.0 MGD



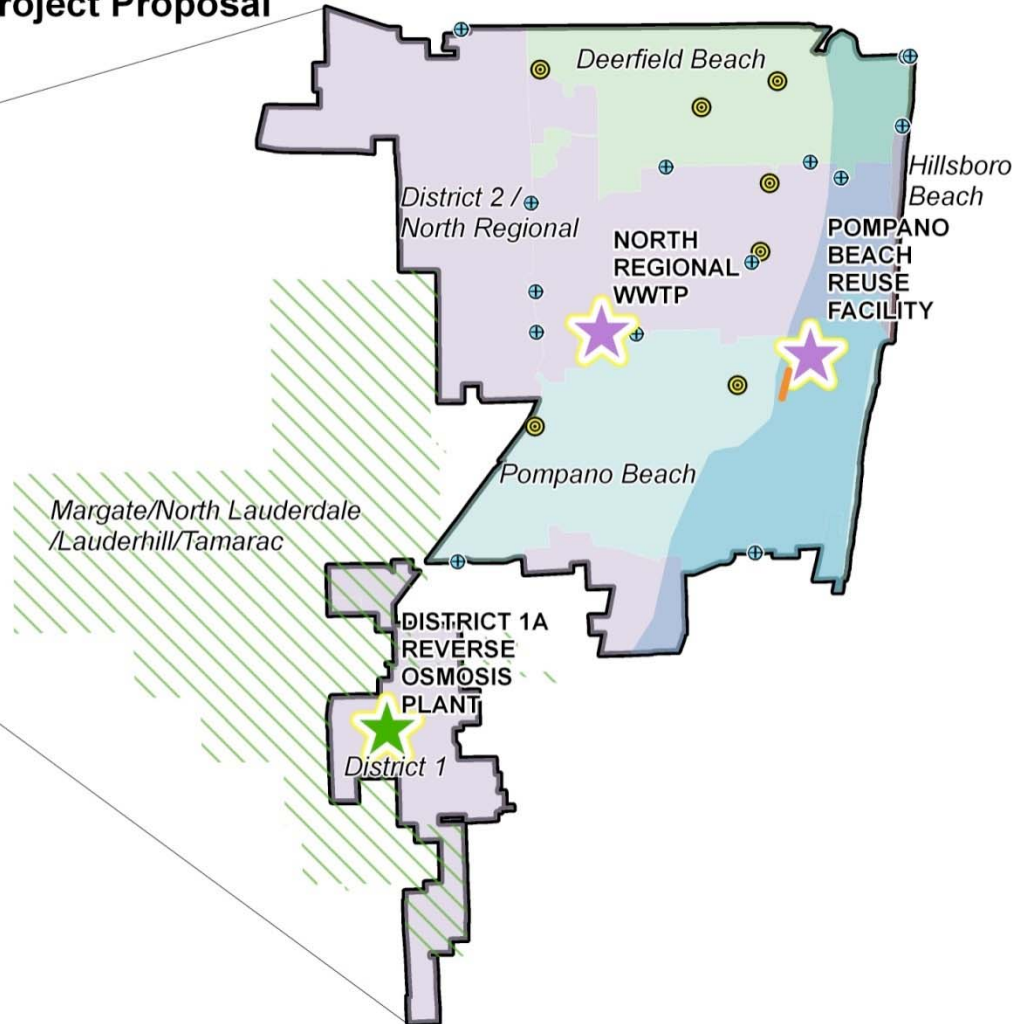
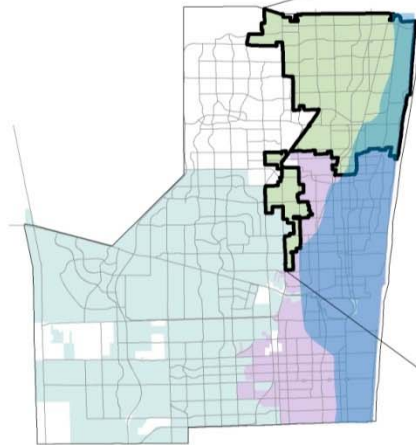
Salt Water Intrusion Protection Pilot Project










- Project Involves:
- 600 Feet of French Drain for Recharge Using Raw Water
- Measure the Hydraulic Effectiveness of the Area Soils
- Future Would be Use of Highly Treated Reuse to Form a salt Water Barrier
- Possible Applications to Broward County Deerfield and Pompano Beach Wellfields

REGION 1 - Regional Floridan Project Proposal

Water Resources Task Force
May 1, 2009



Legend

-  Reuse Facility
-  District 1A Floridan Water Treatment Plant
-  Wellfield
-  Pompano Infiltration Trench
-  Interconnect
-  Saltwater Intruded Area
-  Area to benefit from Project



Region 1 Conceptual Sub-Regional Floridan Projects

- Larger Plant Cost Savings vs. Pipeline System Costs
- Expand Fort Lauderdale Peele-Dixie Floridan Capacity for Future Broward County District 1A Demands
- Expand Broward County District 1A Capacity for Future Margate, North Lauderdale, Lauderhill, and Tamarac Demands
- Expand Deerfield or Pompano Floridan Capacity for Future Broward County District 2A Demands and Transfer Aging Deerfield Biscayne Capacity to Existing Broward County District 2A Capacity
- Construct Larger Broward County Floridan Plant to Serve Both Districts 1A and 2A



Region 1 Recharge of Middle Floridan Aquifer

- State Law Requires the Reuse of 22 MGD, which is 60% of the NRWTP Ocean Outfall Discharge, by 2025
- Issues:
 - Treatment Requirements and Therefore Their Costs Are Uncertain
 - Public Interest and Perception
 - Returns Water to the Floridan System for Sustainability of the Aquifer
 - Reliable During Periods of Heavy Rainfall
 - A Few Wells Can Convey the Flow

This Poor Thing Did Not Find
a Reliable Source of Water in Time



Don't Let this be us in the Future!